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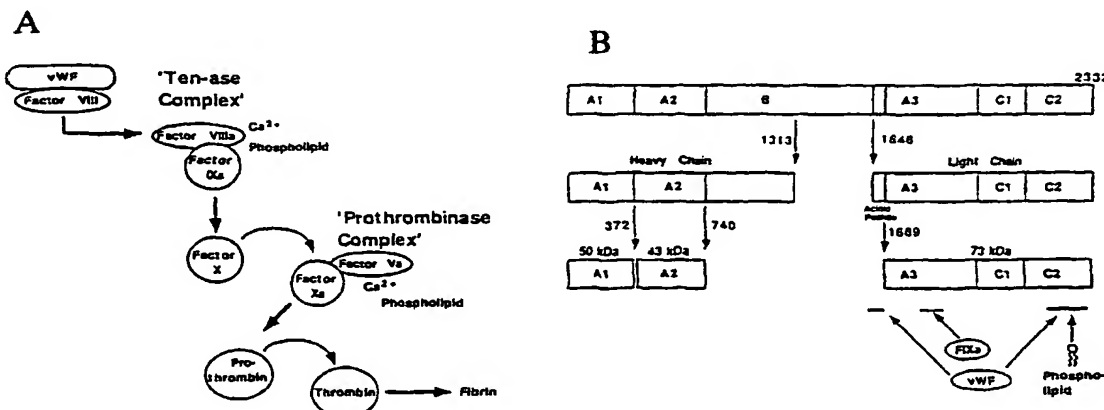
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(54) Title: CRYSTAL OF A TRUNCATED PROTEIN CONSTRUCT CONTAINING A COAGULATION FACTOR VIII C2 DOMAIN IN THE PRESENCE OR ABSENCE OF A BOUND LIGAND AND METHODS OF USE THEREOF



(57) Abstract: A detailed three-dimensional structure for the C-terminal C2 domain of blood coagulation factor VIII is disclosed. The novel truncated factor VIII constructs which were designed so as to omit a significant portion of the flexible full length protein are also part of the present invention. In addition, the crystals of the protein, both in the presence and absence of bound ligands are also included. Furthermore, methods of identifying antagonists of the human factor VIII protein which can be used to inhibit coagulation or to stabilize and activate factor VIII mutants are also disclosed. Furthermore, methods of identifying variations of the C2 domain sequence and structure that can be incorporated into intact factor VIII for the purpose of administration to hemophiliac patients who are immunoreactive against wild type factor VIII are disclosed.

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